

4

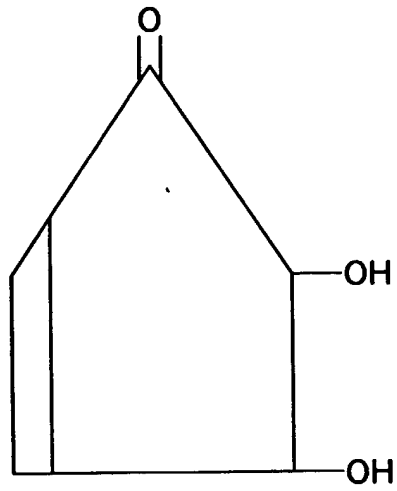


FIG. 1

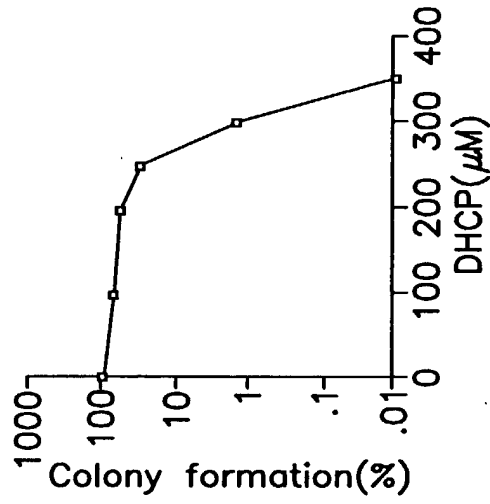


FIG. 2B

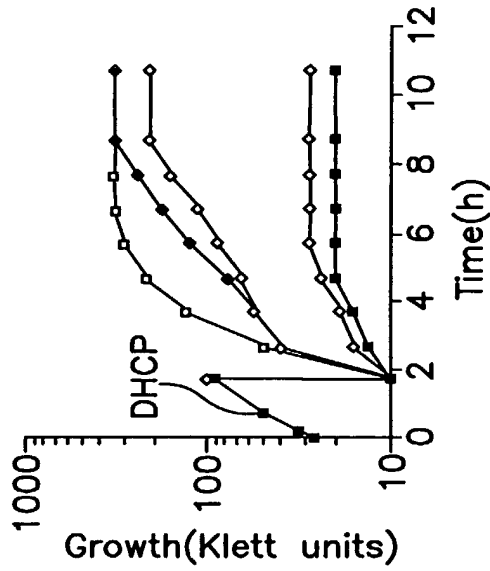


FIG. 2A

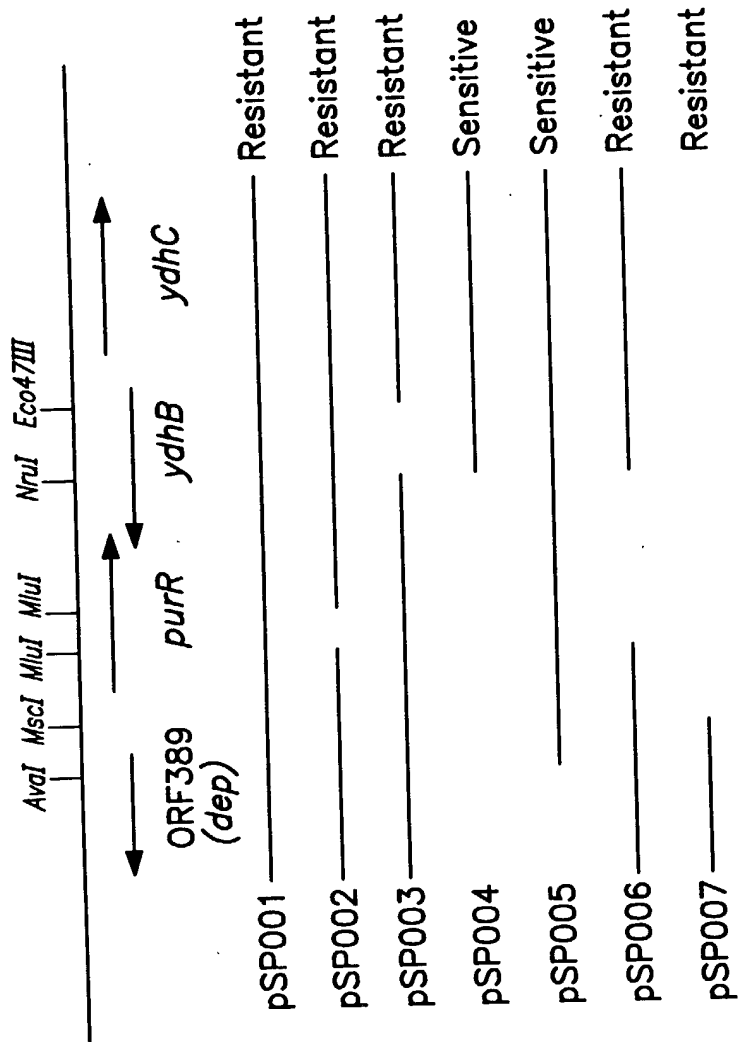


FIG. 3

1 Dep MKINVELLALALGAFGIGTSPMLGPIVARGVDVSI PAAGMLI SAYAVGVAVG APLAALLSHRRARRSALIFLMAIPLG
 1 Cmr PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA SMWORRALTFITM V
 1 CmrA PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 Cml PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 Cmx PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 CmlV PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 BcR PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 Bmr3 PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 Yjcc PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V
 1 Tet PPAVYVLEIVFACTSEMGLIBDVAODVSHETACGLSARAGGCTG APLA ASMWRERRALTFITM V

III

84 Dep NVLSATAPDY MTLMISRLITSUNHGAFFGSGSVVAASVVPKQKQSAVATMFLGTLTANICGVPAATWLGITGMVSLFATGCGVLSVLSFSLPKGCGAR
 82 Cmr HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 CmrA HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 Cml HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 Cmx HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 CmlV HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 BcR HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 Bmr3 HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 Yjcc HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD
 82 Tet HVCATDSEF GVLGATIRICANANETLWGLGAMMSVUPADMKRNTLILGEMHACVGVPEALJGBLWGRASREVEVL SAP JARMASTP ADSPD

189 Dep EVKKEVLAVMEPOVLSALITVILGAGAMITLY IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 Cmr SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 CmrA SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 Cml SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 Cmx SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 CmlV SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 BcR SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
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 186 Yjcc SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL
 186 Tet SVF NATBELSQRKQLILILGALINGATCS IVISPV LOSLHATFVFVTAMLVILEVGFSGN VLGKRLADRSVNT JAGKLLILLAVIHL

282 Dep AIFPAREFCAISVWNG RATAFVVPLOMVRVASEAPC LSSSVNIGAFNLGNALGAAGGAVI SAGCYSFVPV NGATVAGLALLVFNHARKQFETW
 281 Cmr VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 CmrA VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 Cml VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 Cmx VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 CmlV VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 BcR VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 Bmr3 VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 Yjcc VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR
 281 Tet VFAITASHPVVTL M FVQG TLFEVAGSTISRVYADCAFT LGSFATFATN GAALGPATGGVAGI IGRAPWTSAAVLA GAAWT WREPR

FIG. 4

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312  IGGIIVDRRVPYALNIGVTFLEVSSELTASFLLETTTSWFMIIIVTFLGCSFTKTVSTISSLKQOEAGAGMIDNSESLSSTCTCAIISGLISIPLLDPRLLP
Dep 385  CVANS-----
Cmr 384  PALPVP-----
CmrA 384  SQPVP-----
Cml 386  APAPSTR-----
Cmx 388  ABA-----
CmlV 409  PGHVVARSGAGGTTSEPARGKATSSC-----
BcR 372  ....MIW...SIAPCATS...SILFCLYASRPKKR-----
Bmr3 354  ...PQARVM...LTVFM...ISGFGVGFNSLL.P..AASNDLEPRFR.GTANSTNSFLRSFGMTLGVTFIGTVQTNVFTNKLNDAFSGMK.G..SAGSGA.AQNIQDPQE
YjC 366  ...HKKPI...IAVINMALCG.G.GFGFFLS.PNORALMSS.APTTRSGAASGVLGISRIIGOTTGATL...VAFCLYLSDDHGAIEIALRIGIFIAFAGLYGQFVAFAE.
Tet 421  EVDSSTLYSNLLLLFSGIIVISWLVTLNLYKHSORDF-----

390  -----
Cmr 392  -----
CmrA 392  -----
Cml 393  -----
Cmx 392  -----
CmlV 437  -----
BcR 397  -----
Bmr3 450  IFQAGTRSQIPDAILNRIIDAMSSITY.VFLALIPVILAAVTILFMGKARVKITAEMTKKAN
YjC 462  ...KADFKKK.P..LLVRLYSRIKNVPSYLIF-----
Tet 459  -----

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FIG. 4 (cont.)

FIG. 5A

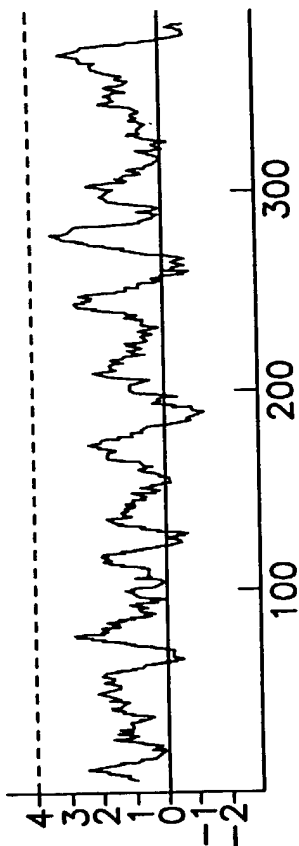


FIG. 5B

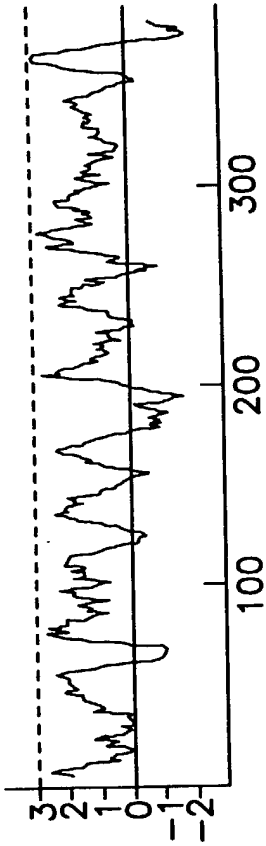
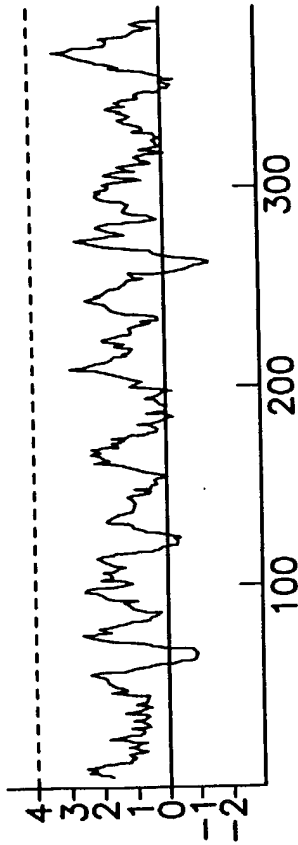


FIG. 5C



4381 gccagccact cttccagctg acgcacggta tagctgaccg cagaaggaaac gcgatgcagc
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 4501 tattctgacc acatagtctg cctgcaaaat ttttgaaacc agtcatcaaa tattaccgtt
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 4801 cttctgtggg ggccgctctc cgaccgttat ggtcgtaaac cgggtattatt aatcggcctg
 4861 acaatttttg cgtaggtag tctggggatg ctgtgggtag aaaacgccgc tacgtgctg
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 4981 gtgacagatt attatccttc acagaaagtt aaccgtattt ttgcggccat catgccgctg
 5041 gtgggtctat ctcggcact ggctcctctg ttaggaagct ggctgctggt ccatttttcc
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 5161 tggctcaaac ccacgacgaa ggcccgtaac aatagtcagg atggtctgac ctttaccgac
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 5461 gctgtcagcg tcattgcgac ctgggctgcg ggcttcatta gccatgtgct gctggctgaa
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 7561 tatttcatca actgactatc ctggacttta aaccagatct ggcgattatt ttctgaggtt
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FIG. 6A

7801 tccgtcacgg tcaggcagca accgttatgc gccacggaag caccggtttc caggccgtcc
 7861 agcatgtggt cgggtaactc caccacatgc gtacgaaaat ttgggtttctc gtcaatcgac
 7921 accagttttg cgggtgccctg tacaatccc gtaaacatac ttacaactcc tgaaatcagt
 7981 taagacattc tggtcagcac aatagcaggt ggaaaacgcc cttaccagtg aaggggtaag
 8041 aatggctatt ttttactgga agaattaata aatcctcgct acaatagact gaatttcccc
 8101 tgcttcttct ttttgctgcc cattcaggcg gcttttttagt ctctcatata actacaaata
 8161 aaaggtgttc acgtgcagaa gtatatcagt gaagcgcgtc tggtattagc attagcaatc
 8221 ccggtgattc tcgcgcgaat cgcccaaact gcgatgggtt ttgtcagtag cgtgatggcg

FIG. 6B

[atgc aacctgggaa aagattttta gtctggctgg cgggtttgag cgtactcggt
 4681 tttctggcaa ccgatatgta tctgcctgct ttccgcccca tacaggccga] cctgcaaacg
 4741 cctgcgtctg ctgtcagtag cagccttagt ctgttccttg ccggttttgc ccgagcccag
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 5821 catagcgaat cacactga

FIG. 7